

10/ 005,133

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NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated  
and searchable  
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in  
CA/CAPLUS  
NEWS 5 FEB 05 German (DE) application and patent publication number format  
changes  
NEWS 6 MAR 03 MEDLINE and LMedline reloaded  
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 03 FRANCEPAT now available on STN  
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
NEWS 10 MAR 29 WPIFV now available on STN  
NEWS 11 MAR 29 No connect hour charges in WPIFV until May 1, 2004  
NEWS 12 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA  
  
NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
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Enter NEWS followed by the item number or name to see news on that  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:38:12 ON 16 APR 2004

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 11:38:23 ON 16 APR 2004

10/ 005,133

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Property values tagged with IC are from the ZIC/VINITI data file  
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STRUCTURE FILE UPDATES: 14 APR 2004 HIGHEST RN 675571-70-7  
DICTIONARY FILE UPDATES: 14 APR 2004 HIGHEST RN 675571-70-7

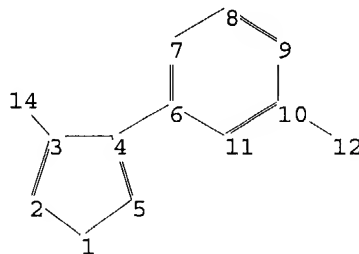
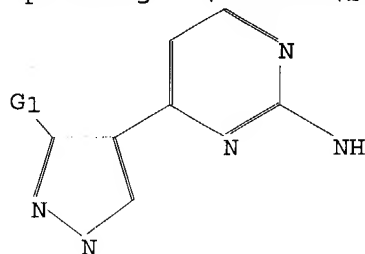
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading C:\STNEXP4\QUERIES\10005133.str



chain nodes :  
12 14  
ring nodes :  
1 2 3 4 5 6 7 8 9 10 11  
chain bonds :  
3-14 4-6 10-12  
ring bonds :  
1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11  
exact/norm bonds :  
1-2 1-5 2-3 3-14 10-12  
exact bonds :  
3-4 4-5 4-6  
normalized bonds :  
6-7 6-11 7-8 8-9 9-10 10-11  
isolated ring systems :  
containing 1 : 6 :

G1:H,Ak

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:CLASS 14:CLASS

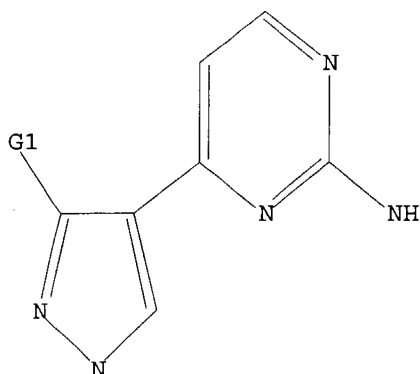
L1 STRUCTURE UPLOADED

10/ 005,133

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 H,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 11:38:41 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1337 TO ITERATE

100.0% PROCESSED 1337 ITERATIONS

44 ANSWERS

SEARCH TIME: 00.00.01

L2 44 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

155.42

155.63

FILE 'CAPLUS' ENTERED AT 11:38:46 ON 16 APR 2004

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FILE COVERS 1907 - 16 Apr 2004 VOL 140 ISS 17

FILE LAST UPDATED: 15 Apr 2004 (20040415/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2

L3

9 L2

=&gt; d l3 1- ibib abs hitstr

YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:41464 CAPLUS

DOCUMENT NUMBER: 140:111424

TITLE: Preparation of phenyl-[4-(3-phenyl-1H-pyrazol-4-yl)-pyrimidin-2-yl]-amines as protein tyrosine kinase inhibitors

INVENTOR(S): Furet, Pascal; Imbach, Patricia; Ramsey, Timothy Michael; Schlapbach, Achim; Scholz, Dieter; Caravatti, Giorgio

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005282	A1	20040115	WO 2003-EP7350	20030708

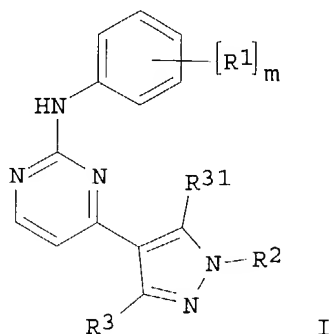
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: AT, BE, BG, CH, CY, CZ, DE, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: GB 2002-15844 A 20020709

OTHER SOURCE(S): MARPAT 140:111424

GI



AB The title compds. [I; m = 1-5; R1 = alkylsulfonyl, (un)substituted aminosulfonyl, amino, etc.; R2 = H, (un)substituted alkyl, heterocyclyl; R3 = H, (un)substituted Ph; R31 = H if R3 = (un)substituted Ph or R31 = (un)substituted Ph if R3 = H; with the proviso], useful for treating diseases which respond to an inhibition of a protein tyrosine kinase, were prepared and formulated. Thus, reacting 2-chloro-4-[3-(4-chlorophenyl)-1H-pyrazol-4-yl]pyrimidine with 4-(4-methylpiperazin-1-yl)phenylamine afforded I [R1 = 4-(4-methylpiperazin-1-yl); m = 1; R2 = H; R3 = 4-ClC6H4; R31 = H] which showed IC50 of 0.018  $\mu$ M, 0.023  $\mu$ M, and 0.01  $\mu$ M

against EGF-R (HER-1), ErbB-2 (HER-2) and VEGF receptor (KDR), resp. The invention relates also to pharmaceutical compns. comprising the compds. I and to the use of such derivs. - alone or in combination with one or more other pharmaceutically active compds. - for the preparation of pharmaceutical compns. for the treatment especially of a proliferative disease, such as a tumor.

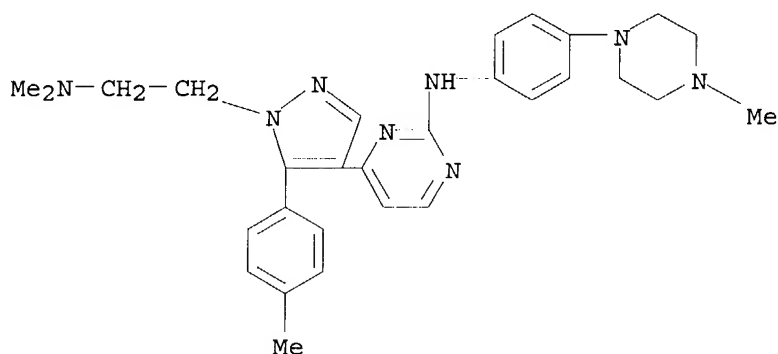
IT 646526-44-5P 646526-52-5P 646526-64-9P  
646526-66-1P 646526-70-7P 646526-81-0P  
646526-83-2P 646526-87-6P 646526-91-2P  
646526-95-6P 646526-99-0P 646527-01-7P  
646527-05-1P 646527-15-3P 646527-21-1P  
646527-49-3P 646527-53-9P 646527-73-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phenyl[4-(3-phenyl-1H-pyrazol-4-yl)pyrimidin-2-yl]amines as protein tyrosine kinase inhibitors)

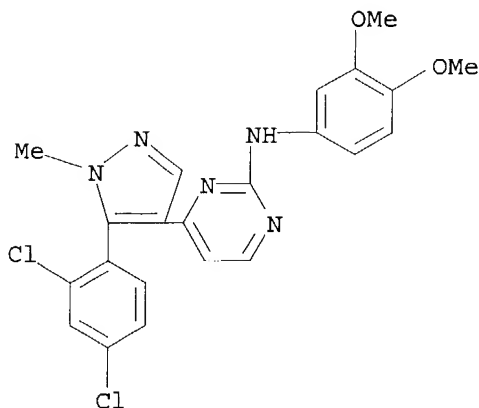
RN 646526-44-5 CAPLUS

CN 2-Pyrimidinamine, 4-[1-[2-(dimethylamino)ethyl]-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



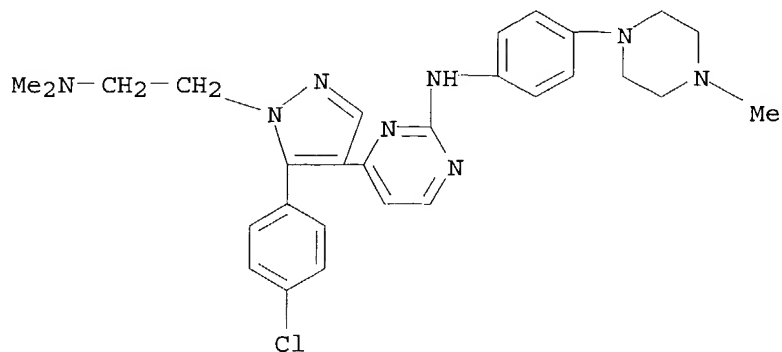
RN 646526-52-5 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(2,4-dichlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-(3,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



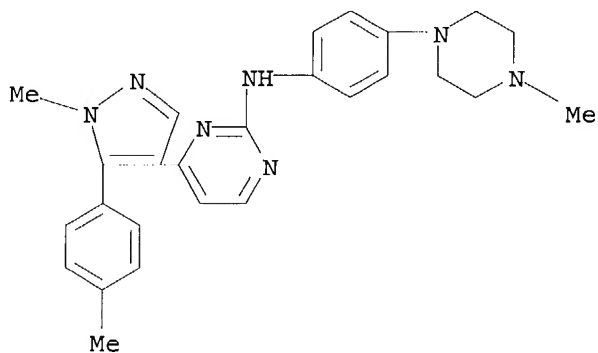
RN 646526-64-9 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



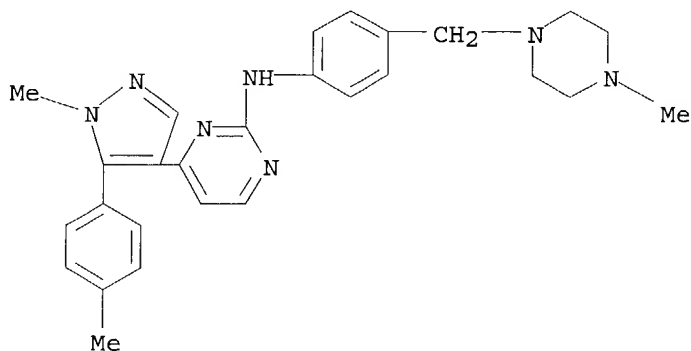
RN 646526-66-1 CAPLUS

CN 2-Pyrimidinamine, 4-[1-methyl-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



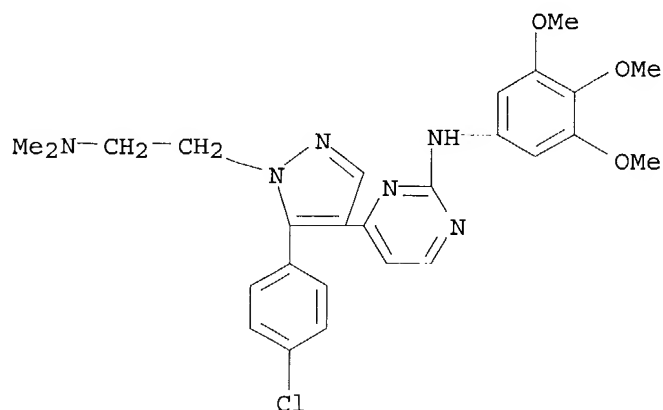
RN 646526-70-7 CAPLUS

CN 2-Pyrimidinamine, 4-[1-methyl-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

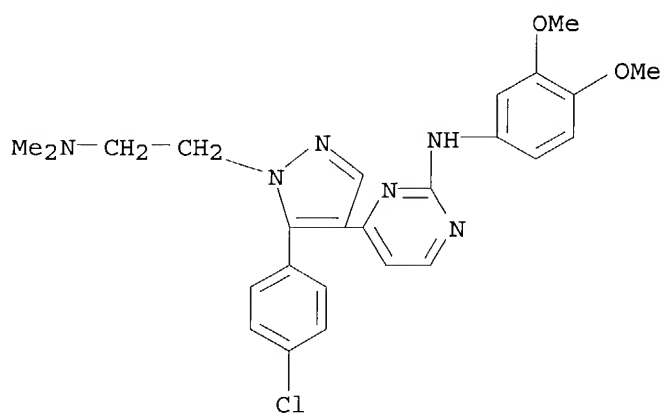


RN 646526-81-0 CAPLUS

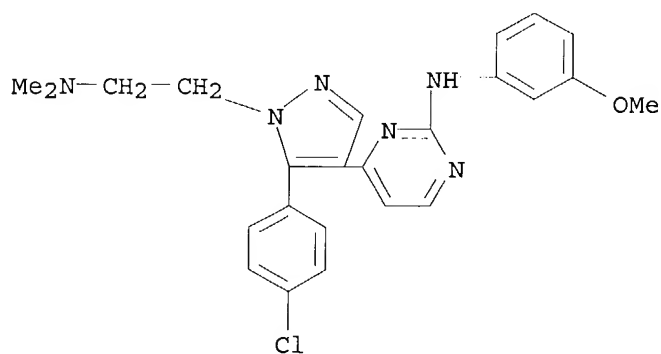
CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 646526-83-2 CAPLUS  
 CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-(3,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



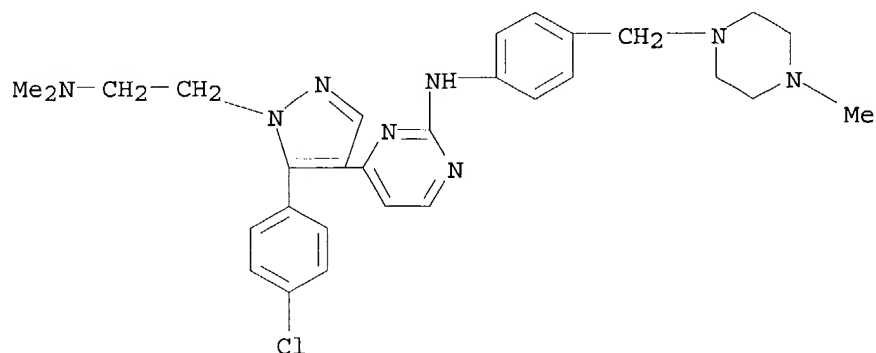
RN 646526-87-6 CAPLUS  
 CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 646526-91-2 CAPLUS  
 CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[2-(dimethylamino)ethyl]-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

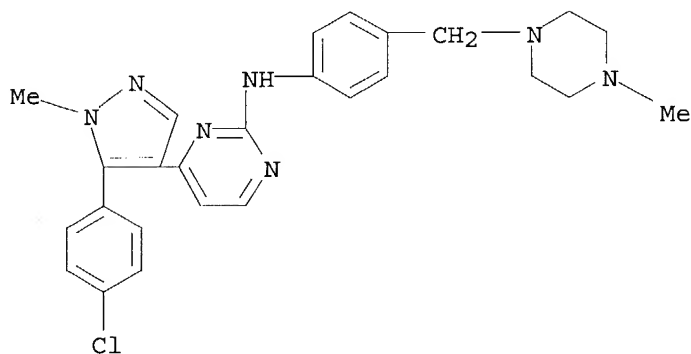
10/ 005,133

INDEX NAME)



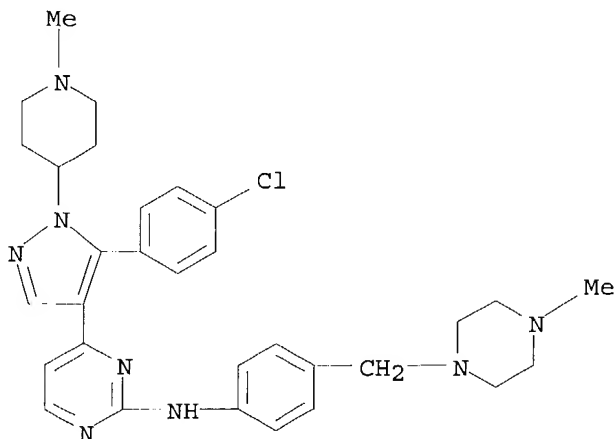
RN 646526-95-6 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



RN 646526-99-0 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-(1-methyl-4-piperidinyl)-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

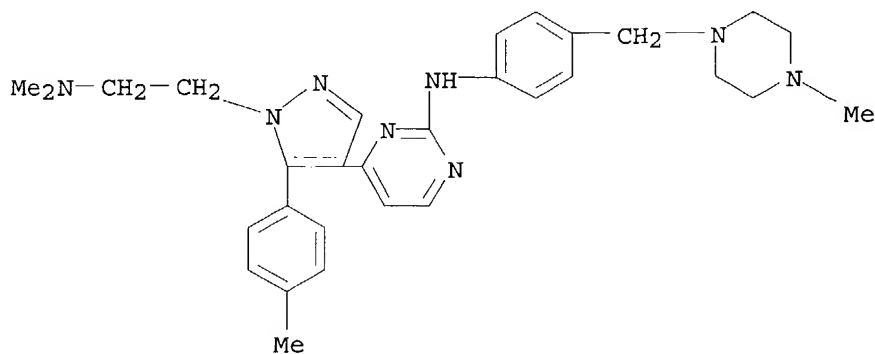


RN 646527-01-7 CAPLUS



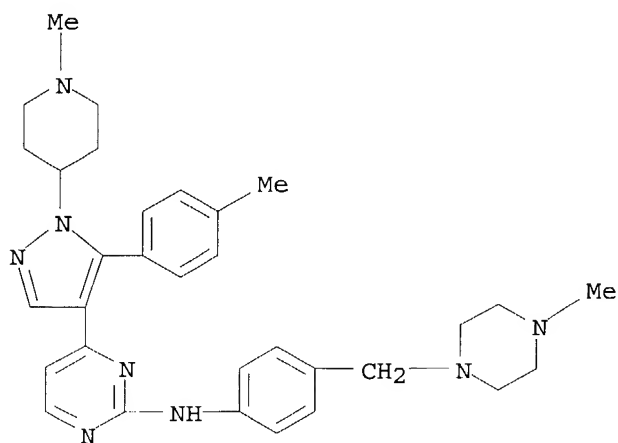
10/ 005,133

CN 2-Pyrimidinamine, 4-[1-[2-(dimethylamino)ethyl]-5-(4-methylphenyl)-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



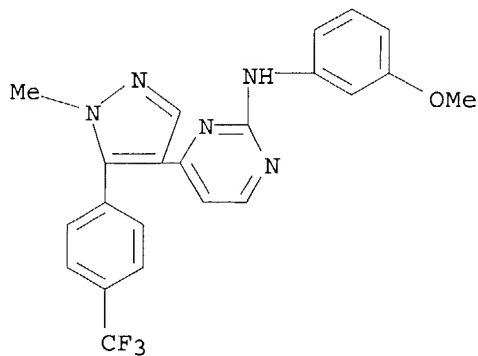
RN 646527-05-1 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-methylphenyl)-1-(1-methyl-4-piperidiny)-1H-pyrazol-4-yl]-N-[4-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)



RN 646527-15-3 CAPLUS

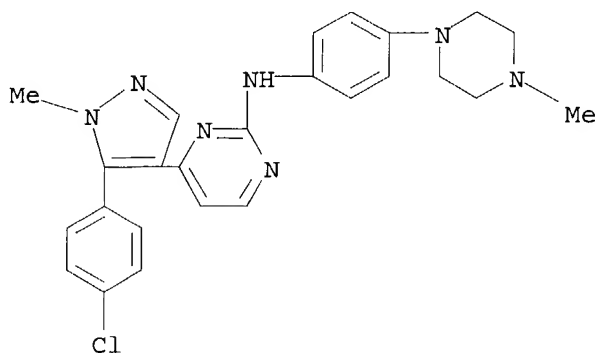
CN 2-Pyrimidinamine, N-(3-methoxyphenyl)-4-[1-methyl-5-[4-(trifluoromethyl)phenyl]-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



10/ 005,133

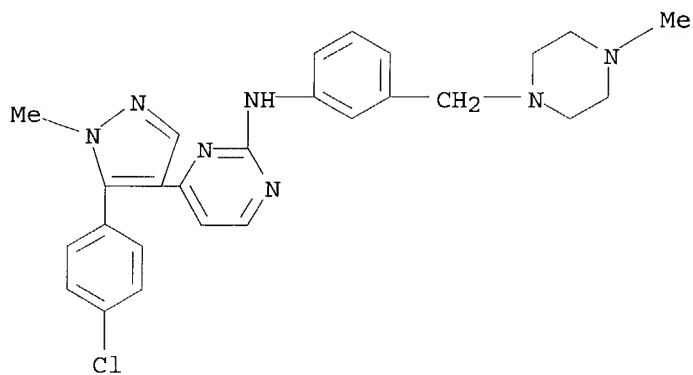
RN 646527-21-1 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-[4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



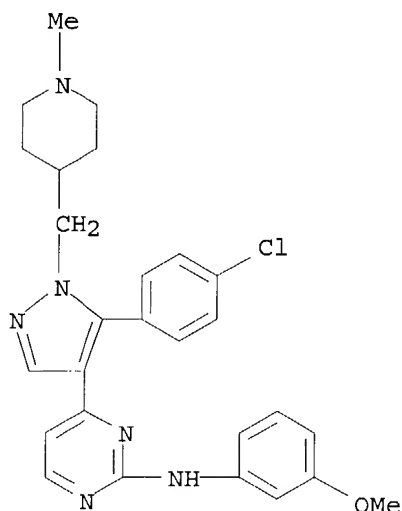
RN 646527-49-3 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-methyl-1H-pyrazol-4-yl]-N-[3-[(4-methyl-1-piperazinyl)methyl]phenyl]- (9CI) (CA INDEX NAME)

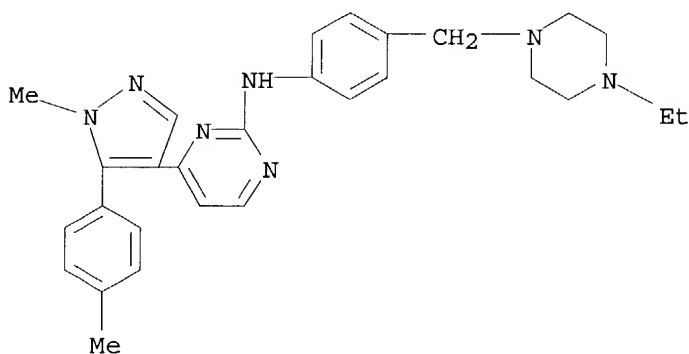


RN 646527-53-9 CAPLUS

CN 2-Pyrimidinamine, 4-[5-(4-chlorophenyl)-1-[(1-methyl-4-piperidinyl)methyl]-1H-pyrazol-4-yl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 646527-73-3 CAPLUS  
 CN 2-Pyrimidinamine, N-[4-[(4-ethyl-1-piperazinyl)methyl]phenyl]-4-[1-methyl-5-(4-methylphenyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

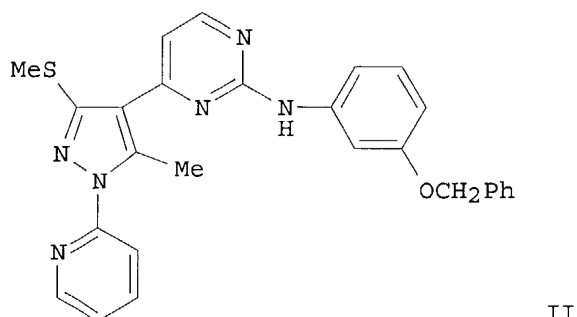
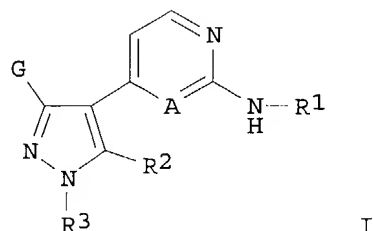


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:590836 CAPLUS  
 DOCUMENT NUMBER: 139:149624  
 TITLE: Preparation of 1,4-diarylpyrazole inhibitors of src and other protein kinases  
 INVENTOR(S): Young, Choon Moon  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 35 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003144309	A1	20030731	US 2002-146984	20020516
PRIORITY APPLN. INFO.:			US 2002-146984	20020516
OTHER SOURCE(S):		MARPAT 139:149624		

GI



AB Title compds. I [G = XR, XAr; X = alkylidene wherein one or two non-adjacent methylene units of X are replaced by O, amino, S, CO, etc.; A = N, CR; R = H, aliphatic, etc.; Ar = (un)substituted 5-6 membered (un)saturated monocyclic ring, etc.; R1 = TnR, TnAr; n = 0-1; T = CO, CO2, COCO, etc.; R2 = H, Ar, aliphatic; R3 = R, Ar] are prepared For instance, 3-(bis(methylsulfanyl)methylene)pentane-2,4-dione (preparation given) is condensed with (pyridin-2-yl)hydrazine to give 1-[5-methyl-3-(methylsulfanyl)-1-(pyridin-2-yl)-1H-pyrazole-4-yl]ethanone. This intermediate is reacted with DMFDMA (reflux) and the resulting  $\beta$ -amino enone condensed with N-(3-benzyloxyphenyl)guanidine to give II. Many of the compds. have  $K_i \leq 1 \mu\text{M}$  for src kinase. I are inhibitors of protein kinase, particularly inhibitors of src mammalian protein kinase involved in cell proliferation, cell death in response to extracellular stimuli.

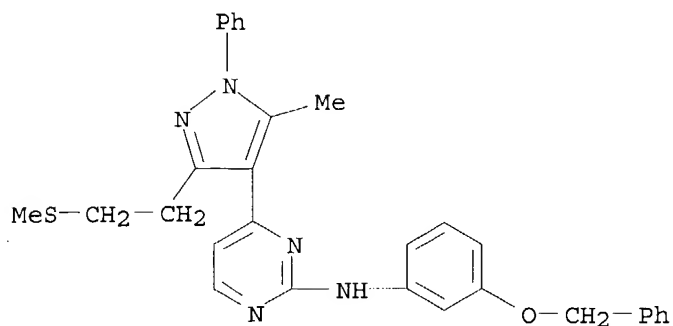
IT 475574-56-2P 475574-57-3P 475574-58-4P  
475574-59-5P 475574-60-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

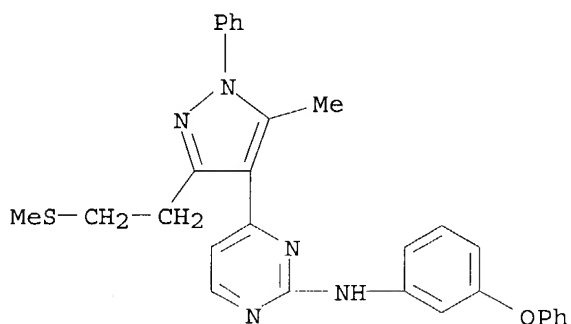
(preparation of 1-phenyl-4-pyrimidinyl-substituted pyrazole inhibitors of src and other protein kinases)

RN 475574-56-2 CAPLUS

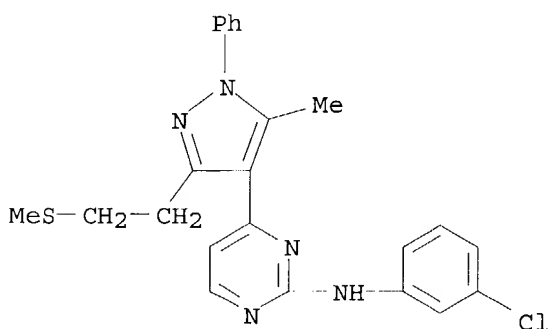
CN 2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



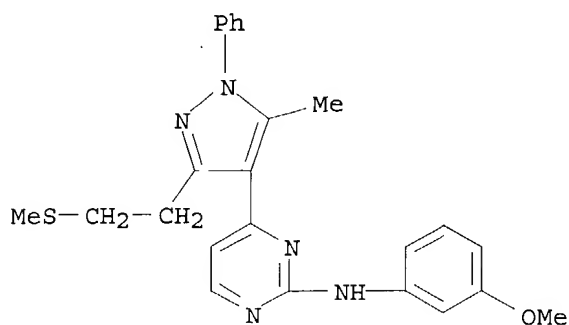
RN 475574-57-3 CAPLUS  
 CN 2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-(3-phenoxyphenyl)- (9CI) (CA INDEX NAME)



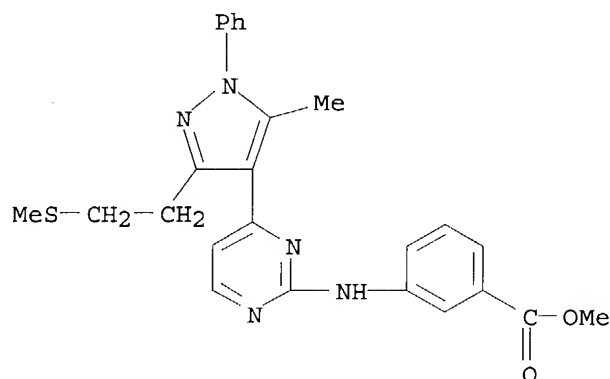
RN 475574-58-4 CAPLUS  
 CN 2-Pyrimidinamine, N-(3-chlorophenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 475574-59-5 CAPLUS  
 CN 2-Pyrimidinamine, N-(3-methoxyphenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 475574-60-8 CAPLUS  
 CN Benzoic acid, 3-[[4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-2-pyrimidinyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:150531 CAPLUS

DOCUMENT NUMBER: 138:187765

TITLE: Preparation of heteroarylpyrazoles as p38 kinase inhibitors

INVENTOR(S): Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Zuowu; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Graneto, Matthew J.; Hanau, Cathleen E.; Hanson, Gunnar J.; Hartmann, Susan J.; Hepperle, Michael; Huang, He; Koszyk, Francis J.; Liao, Shuyuan; Metz, Suzanne; Partis, Richard A.; Perry, Thao D.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey, Michael A.; Talley, John Jeffrey; Vazquez, Michael L.; Weier, Richard M.; Xu, Xiangdong; Khanna, Ish K.; Yu, Yi

PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: U.S., 415 pp., Cont.-in-part of U.S. Ser. No. 196,623. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6525059	B1	20030225	US 2000-513351	20000224
US 6514977	B1	20030204	US 1998-196623	19981120

WO 2000031063 A1 20000602 WO 1999-US26007 19991117

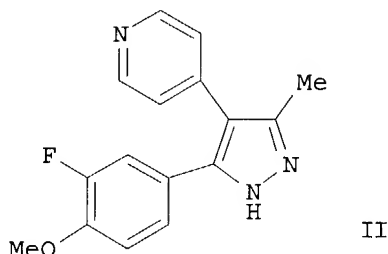
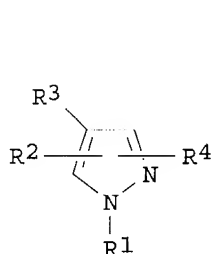
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 1998-196623 A2 19981120  
 WO 1999-US26007 A1 19991117  
 US 1997-47570P P 19970522  
 US 1998-83670 A2 19980522

OTHER SOURCE(S): MARPAT 138:187765  
 GI



AB Title compds. [I; R1 = H, OH, NH<sub>2</sub>, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = (un)substituted piperidinyl; R3 = (un)substituted pyrimidinyl; R4 = (un)substituted Ph; and pharmaceutically acceptable salts or tautomers thereof] were prepared by solution phase and solid phase parallel array reactions of ketones with hydrazines. Thus, R<sub>3</sub>CH<sub>2</sub>COMe (R<sub>3</sub> = 4-pyridinyl) was condensed with 3,4-F(MeO)C<sub>6</sub>H<sub>3</sub>CHO to give the butenone (80%), which was cyclocondensed with TsNHNH<sub>2</sub> to afford the title compound II (20.7%). The latter inhibited human p38 kinase activity in vitro with IC<sub>50</sub> of 4.6 μM and inhibited tumor necrosis factor α (TNFα) and interleukin 1β (IL-1β) release from human peripheral blood mononuclear cells following stimulation with lipopolysaccharide with IC<sub>50</sub> of 0.5 μM. Thus, I are useful for the treatment of inflammation, arthritis, asthma, and other disorders mediated by p38 kinase and TNFα.

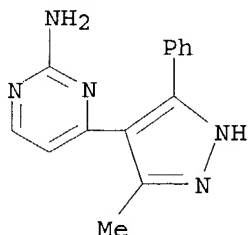
IT 216505-48-5P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(p38 kinase inhibitor; preparation of heteroarylpyrazole p38 kinase inhibitors by cyclocondensation of hydrazines with ketones)

RN 216505-48-5 CAPLUS

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:92403 CAPLUS

DOCUMENT NUMBER: 138:137307

TITLE: Preparation of heteroarylpyrazoles as p38 kinase inhibitors

INVENTOR(S): Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Zuowu; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Graneto, Matthew J.; Hanau, Cathleen E.; Hanson, Gunnar J.; Hartmann, Susan J.; Hepperle, Michael; Huang, He; Koszyk, Francis J.; Liao, Shuyuan; Metz, Suzanne; Partis, Richard A.; Perry, Thao D.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey, Michael A.; Talley, John Jeffrey; Vazquez, Michael L.; Weier, Richard M.; Xu, Xiangdong; Khanna, Ish K.; Yu, Yi

PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: U.S., 541 pp., Cont.-in-part of U.S. Ser. No. 83,670. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6514977	B1	20030204	US 1998-196623	19981120
WO 2000031063	A1	20000602	WO 1999-US26007	19991117
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1144403	A1	20011017	EP 1999-965756	19991117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9915420	A	20020122	BR 1999-15420	19991117
EE 200100268	A	20021216	EE 2001-268	19991117
NZ 512344	A	20031128	NZ 1999-512344	19991117
US 6525059	B1	20030225	US 2000-513351	20000224
ZA 2001003882	A	20021014	ZA 2001-3882	20010514
NO 2001002456	A	20010719	NO 2001-2456	20010518
BG 105620	A	20020131	BG 2001-105620	20010619
US 6423713	B1	20020723	US 2001-918481	20010731
US 6617324	B1	20030909	US 2002-114297	20020402



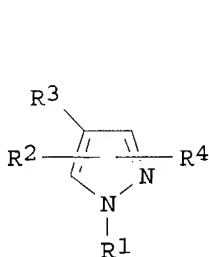
10/ 005,133

PRIORITY APPLN. INFO.:

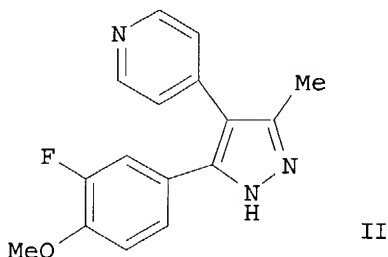
US 1997-47570P	P 19970522
US 1998-83670	A2 19980522
US 1998-196623	A 19981120
WO 1999-US26007	W 19991117
US 2001-918481	A3 20010731

OTHER SOURCE(S):  
GI

MARPAT 138:137307



I



II

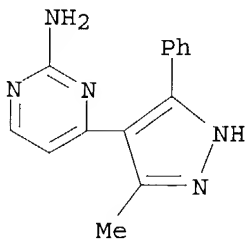
AB Title compds. [I; R1 = H, OH, NH<sub>2</sub>, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = (un)substituted piperidinyl or piperazinyl; R3 = (un)substituted pyrimidinyl; R4 = (un)substituted Ph; and pharmaceutically acceptable salts or tautomers thereof] were prepared by solution phase and solid phase parallel array reactions of ketones with hydrazines. Thus, R<sub>3</sub>CH<sub>2</sub>COMe (R<sub>3</sub> = 4-pyridinyl) was condensed with 3,4-F(MeO)C<sub>6</sub>H<sub>3</sub>CHO to give the butenone (80%), which was cyclocondensed with TsNHNH<sub>2</sub> to afford the title compound II (20.7%). The latter inhibited human p38 kinase activity in vitro with IC<sub>50</sub> of 4.6 μM and inhibited tumor necrosis factor α (TNFα) and interleukin 1β (IL-1β) release from human peripheral blood mononuclear cells following stimulation with lipopolysaccharide with IC<sub>50</sub> of 0.5 μM. Thus, I are useful for the treatment of inflammation, arthritis, asthma, and other disorders mediated by p38 kinase and TNFα.

IT 216505-48-5P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)  
(p38 kinase inhibitor; preparation of heteroarylpyrazole p38 kinase inhibitors by cyclocondensation of hydrazines with ketones)

RN 216505-48-5 CAPLUS

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

76

THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:888716 CAPLUS

DOCUMENT NUMBER: 137:384853

TITLE: Preparation of pyrazolyl pyridinamines and pyrimidinamines as inhibitors of Src and other protein kinases

INVENTOR(S): Moon, Young-Choon

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 75 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

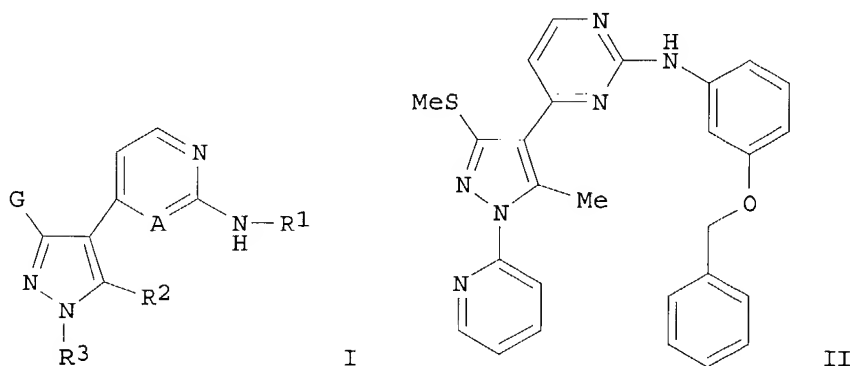
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092573	A2	20021121	WO 2002-US15606	20020516
WO 2002092573	A3	20040122		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1404669	A2	20040407	EP 2002-769762	20020516
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:		US 2001-291340P P 20010516		
		WO 2002-US15606 W 20020516		

OTHER SOURCE(S): MARPAT 137:384853

GI



AB Title compds. I [wherein G = XR or XAR; X = independently alkylidene wherein 1-2 non-adjacent methylene units are independently replaced by O, NR, S, CO, CONR, NRCO, NRCONR, SO, SO<sub>2</sub>, NRSO<sub>2</sub>, SO<sub>2</sub>NR, or NRSO<sub>2</sub>NR; A = N or CR; R = H or (un)substituted aliphatic group; or NR<sub>2</sub> = heterocyclyl; Ar = (un)substituted 5-6 membered monocyclic ring with 0-3 heteroatoms or 8-10 membered bicyclic ring with 0-4 heteroatoms; R<sub>1</sub> = TnR or TnAr; n = 0-1; T = CO, CO<sub>2</sub>, COCO, COCH<sub>2</sub>CO, CONR, SO<sub>2</sub>, or SO<sub>2</sub>NR; R<sub>2</sub> = H, Ar, or (un)substituted aliphatic group; R<sub>3</sub> = R or Ar; or pharmaceutically acceptable derivs. thereof] were prepared as inhibitors of protein kinase, particularly inhibitors of Src mammalian protein kinase involved in cell proliferation,

cell death and response to extracellular stimuli (no data). For example, 3-dimethylamino-1-[5-methyl-3-methylsulfanyl-1-(pyridin-2-yl)-1H-pyrazol-4-yl]propanone was coupled with N-(3-benzyloxyphenyl)guanidine in MeOH to give II (40%). I and compns. containing I are useful in the treatment and prevention of various inflammatory, autoimmune, destructive bone, proliferative, infectious, neurodegenerative, allergic, and cardiac disorders and diseases (no data).

IT **475574-56-2P**, N-(3-(Benzyloxy)phenyl)-N-[4-[5-methyl-3-(2-(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine

**475574-57-3P**, N-(3-Phenoxyphenyl)-N-[4-[5-methyl-3-(2-(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine

**475574-58-4P**, N-(3-Chlorophenyl)-N-[4-[5-methyl-3-(2-(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine

**475574-59-5P**, N-(3-Methoxyphenyl)-N-[4-[5-methyl-3-(2-(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine

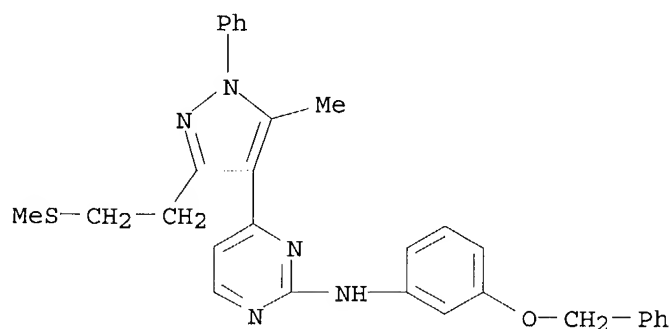
**475574-60-8P**, N-(3-(Methoxycarbonyl)phenyl)-N-[4-[5-methyl-3-(2-(methylthio)ethyl)-1-phenyl-1H-pyrazol-4-yl]pyrimidin-2-yl]amine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Src protein kinase inhibitor; preparation of pyrazolyl pyrimidinamines and pyrimidinamine inhibitors of protein kinases using condensation, cyclization, and substitution reactions)

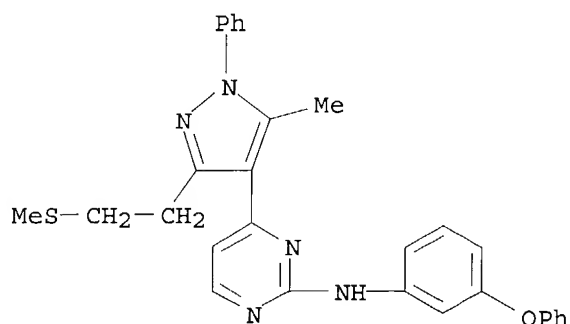
RN 475574-56-2 CAPLUS

CN 2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-[3-(phenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



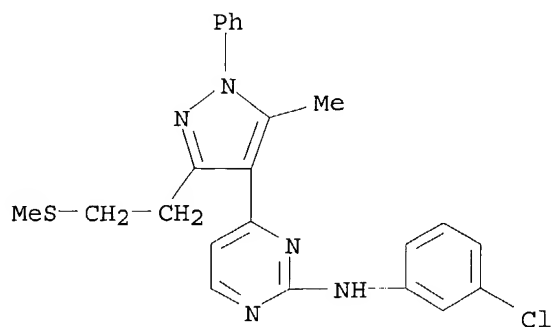
RN 475574-57-3 CAPLUS

CN 2-Pyrimidinamine, 4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-N-(3-phenoxyphenyl)- (9CI) (CA INDEX NAME)

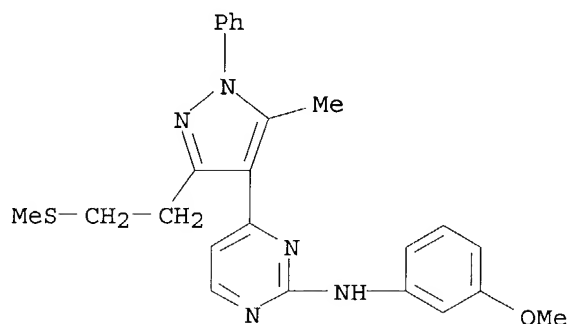


RN 475574-58-4 CAPLUS

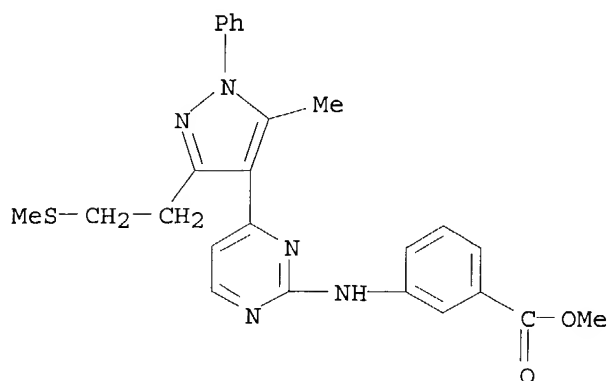
CN 2-Pyrimidinamine, N-(3-chlorophenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 475574-59-5 CAPLUS  
 CN 2-Pyrimidinamine, N-(3-methoxyphenyl)-4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 475574-60-8 CAPLUS  
 CN Benzoic acid, 3-[[4-[5-methyl-3-[2-(methylthio)ethyl]-1-phenyl-1H-pyrazol-4-yl]-2-pyrimidinyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2002:449675 CAPLUS  
 DOCUMENT NUMBER: 137:33311  
 TITLE: Preparation of pyrazolylpyridine- and  
 -pyrimidineamines as JNK inhibitors  
 INVENTOR(S): Ledebor, Mark; Salituro, Francesco; Moon, Young-Choon  
 PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

10/ 005,133

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046184	A1	20020613	WO 2001-US46383	20011205
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002028783	A5	20020618	AU 2002-28783	20011205
US 2002111353	A1	20020815	US 2001-5133	20011205
EP 1343781	A1	20030917	EP 2001-989898	20011205
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

PRIORITY APPLN. INFO.:

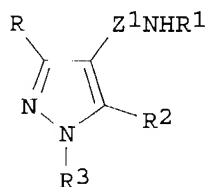
US 2000-251409P P 20001205

WO 2001-US46383 W 20011205

OTHER SOURCE(S):

MARPAT 137:33311

GI



I

AB Title compds. (I; R = H or alkyl; R1 = cycloalkyl, Ph, pyridyl, etc.; R2 = H, alkoxymethyl, heterocyclylmethyl, etc.; R3 = Ph, CH2Ph, etc.; Z1 = pyridine- or pyrimidine-4,2-diyl) were prepared Thus, R4Z1CH(CHO)2 (R4 = MeS, Z1 = pyrimidine-2,4-diyl) was cyclocondensed with H2NNHC6H3F2-2,4 and the S-oxidized product aminated by cyclohexylamine to give I (R = R2 = H, R1 = cyclohexyl, R3 = C6H3F2-2,4). Data for biol. activity of I were given.

IT 434283-94-0P 434283-95-1P 434283-96-2P  
434283-97-3P 434283-98-4P 434283-99-5P  
434284-00-1P 434284-01-2P 434284-02-3P  
434284-03-4P

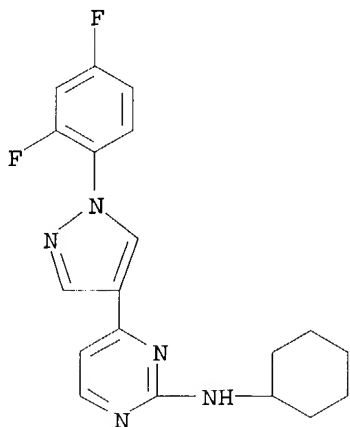
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazolylpyridine- and -pyrimidineamines as JNK inhibitors)

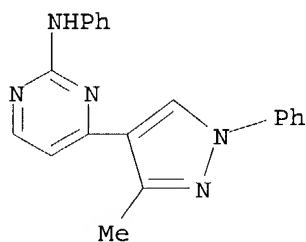
RN 434283-94-0 CAPLUS

CN 2-Pyrimidinamine, N-cyclohexyl-4-[1-(2,4-difluorophenyl)-1H-pyrazol-4-yl]-  
(9CI) (CA INDEX NAME)

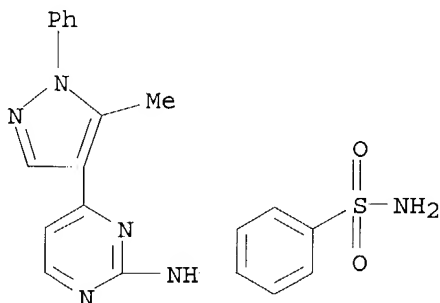
10/ 005,133



RN 434283-95-1 CAPLUS  
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(CA INDEX NAME)

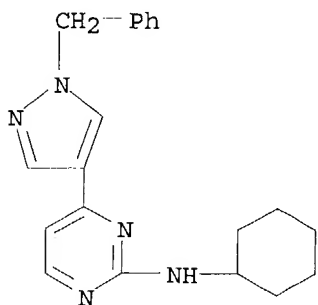


RN 434283-96-2 CAPLUS  
CN Benzenesulfonamide, 4-[[4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-2-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

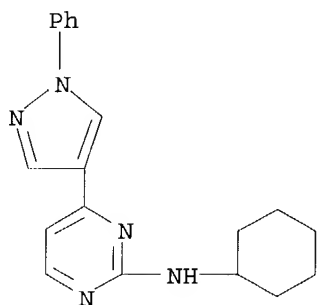


RN 434283-97-3 CAPLUS  
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(CA INDEX NAME)

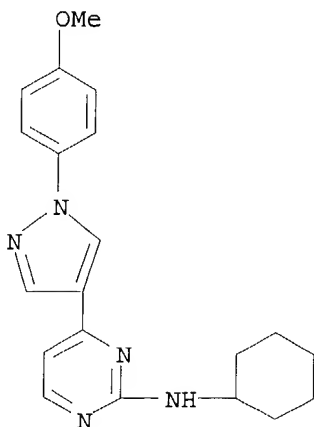
10/ 005,133



RN 434283-98-4 CAPLUS  
CN 2-Pyrimidinamine, N-cyclohexyl-4-(1-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

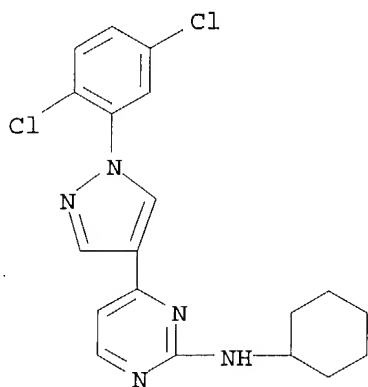


RN 434283-99-5 CAPLUS  
CN 2-Pyrimidinamine, N-cyclohexyl-4-[1-(4-methoxyphenyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

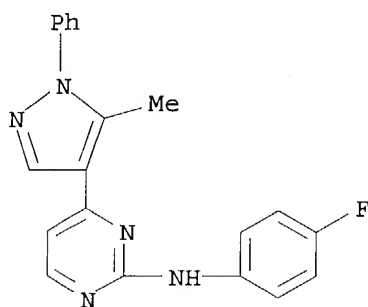


RN 434284-00-1 CAPLUS  
CN 2-Pyrimidinamine, N-cyclohexyl-4-[1-(2,5-dichlorophenyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

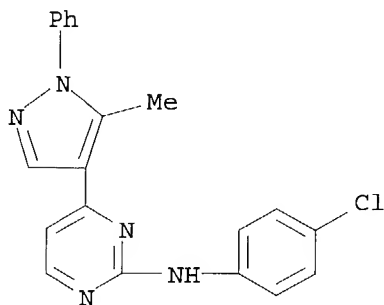
10/ 005,133



RN 434284-01-2 CAPLUS  
CN 2-Pyrimidinamine, N-(4-fluorophenyl)-4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-  
(9CI) (CA INDEX NAME)

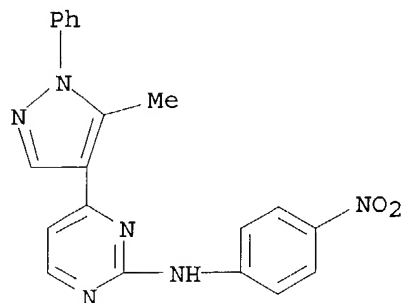


RN 434284-02-3 CAPLUS  
CN 2-Pyrimidinamine, N-(4-chlorophenyl)-4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-  
(9CI) (CA INDEX NAME)



RN 434284-03-4 CAPLUS  
CN 2-Pyrimidinamine, 4-(5-methyl-1-phenyl-1H-pyrazol-4-yl)-N-(4-nitrophenyl)-  
(9CI) (CA INDEX NAME)





REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STM

ACCESSION NUMBER: 2000:368337 CAPLUS

DOCUMENT NUMBER: 133:4656

TITLE: Preparation of heteroarylpyrazoles as p38 kinase inhibitors

INVENTOR(S): Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Z.; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Graneto, Matthew J.; Hanau, Cathleen E.; Hanson, Gunnar J.; Hartmann, Susan J.; Hepperle, Michael; Huang, He; Khanna, Ish K.; Koszyk, Francis J.; Liao, Shuyuan; Metz, Suzanne; Partis, Richard A.; Perry, Thao D.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey, Michael A.; Talley, John Jeffrey; Vazquez, Michael L.; Weier, Richard M.; Xu, Xiangdong; Yu, Yi

PATENT ASSIGNEE(S): G.D. Searle and Co., USA

SOURCE: PCT Int. Appl., 1210 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031063	A1	20000602	WO 1999-US26007	19991117
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6514977	B1	20030204	US 1998-196623	19981120
EP 1144403	A1	20011017	EP 1999-965756	19991117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9915420	A	20020122	BR 1999-15420	19991117
EE 200100268	A	20021216	EE 2001-268	19991117
NZ 512344	A	20031128	NZ 1999-512344	19991117
US 6525059	B1	20030225	US 2000-513351	20000224
NO 2001002456	A	20010719	NO 2001-2456	20010518
BG 105620	A	20020131	BG 2001-105620	20010619
PRIORITY APPLN. INFO.:			US 1998-196623	A 19981120

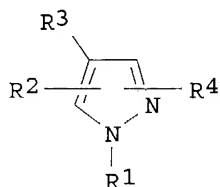
US 1997-47570P P 19970522

US 1998-83670 A2 19980522

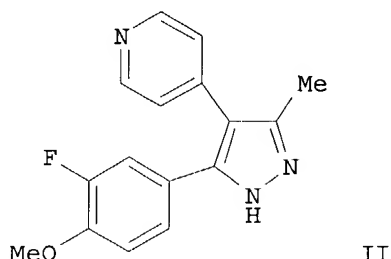
WO 1999-US26007 W 19991117

OTHER SOURCE(S):  
GI

MARPAT 133:4656



I



II

AB Title compds. [I; R1 = H, OH, NH<sub>2</sub>, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = H, halo, alkyl, alkoxy, (un)substituted piperidinyl, etc.; R3 = pyridyl, pyrimidinyl, quinolyl, etc.; R4 = H, alkyl, heterocyclyl, aryl, etc.] were prepared by reaction of ketones with hydrazines. Thus, R<sub>3</sub>CH<sub>2</sub>CO<sub>2</sub>Me (R<sub>3</sub> = 4-pyridinyl) was condensed with 3,4-F(MeO)C<sub>6</sub>H<sub>3</sub>CHO and the product cyclocondensed with TsNHNH<sub>2</sub> to give title compound II. Data for biol. activity of I were given.

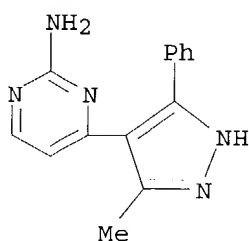
IT 216505-48-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heteroarylpyrazole p38 kinase inhibitors by cyclocondensation of hydrazines with ketones)

RN 216505-48-5 CAPLUS

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:700930 CAPLUS

DOCUMENT NUMBER: 132:151766

TITLE: Synthesis and antimicrobial activity of 4-(4-pyrazolyl)-2-aminopyrimidines

AUTHOR(S): Singh, Shiv P.; Batra, Hitesh; Naithani, Rajesh; Prakash, Om

CORPORATE SOURCE: Department of Chemistry, Kurukshetra University, Kurukshetra, 136 119, India

SOURCE: Indian Journal of Heterocyclic Chemistry (1999), 9(1), 73-74

CODEN: IJCHEI; ISSN: 0971-1627

PUBLISHER: Prof. R. S. Varma  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB 1-(Pyrazol-4-yl)-1,3 butanediones on condensation with guanidine carbonate give 4-(4-pyrazolyl)-2-aminopyrimidines in good yields. A few compds. show moderate level of antimicrobial activity.

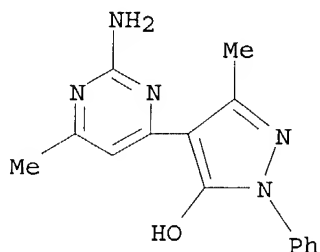
IT 257625-23-3P 257625-24-4P 257625-25-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antimicrobial activity of [hydroxy(methyl)pyrazolyl]pyrimidinamines)

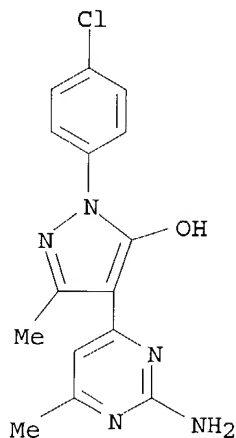
RN 257625-23-3 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-phenyl-(9CI) (CA INDEX NAME)



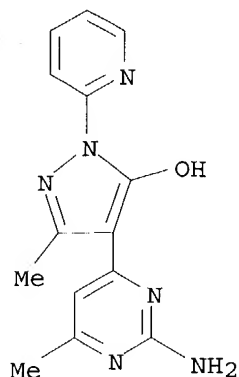
RN 257625-24-4 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-1-(4-chlorophenyl)-3-methyl- (9CI) (CA INDEX NAME)



RN 257625-25-5 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(2-pyridinyl)- (9CI) (CA INDEX NAME)

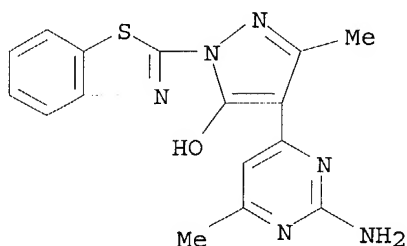


IT 257625-26-6P 257625-27-7P 257625-28-8P  
257625-29-9P 257625-30-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

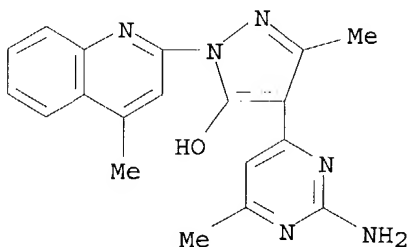
RN 257625-26-6 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-1-(2-benzothiazolyl)-3-methyl- (9CI) (CA INDEX NAME)



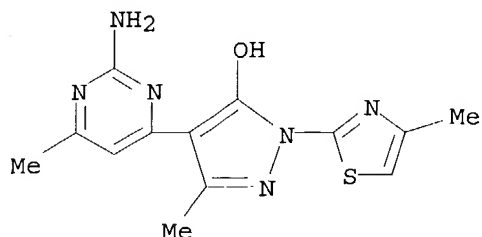
RN 257625-27-7 CAPLUS

CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(4-methyl-2-quinolinyl)- (9CI) (CA INDEX NAME)

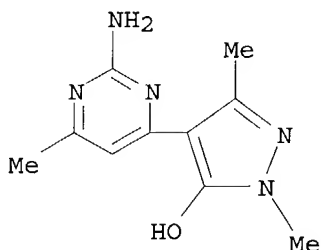


RN 257625-28-8 CAPLUS

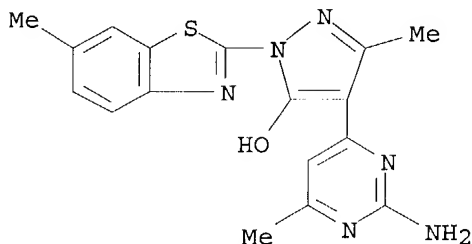
CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(4-methyl-2-thiazolyl)- (9CI) (CA INDEX NAME)



RN 257625-29-9 CAPLUS  
CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-1,3-dimethyl- (9CI)  
(CA INDEX NAME)



RN 257625-30-2 CAPLUS  
CN 1H-Pyrazol-5-ol, 4-(2-amino-6-methyl-4-pyrimidinyl)-3-methyl-1-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:789144 CAPLUS

DOCUMENT NUMBER: 130:38377

TITLE: Preparation of heteroarylpyrazoles as p38 kinase inhibitors

INVENTOR(S): Anantanarayan, Ashok; Clare, Michael; Collins, Paul W.; Crich, Joyce Zuowu; Devraj, Rajesh; Flynn, Daniel L.; Geng, Lifeng; Hanson, Gunnar J.; Koszyk, Francis J.; Liao, Shuyuan; Partis, Richard A.; Rao, Shashidhar N.; Selness, Shaun Raj; South, Michael S.; Stealey, Michael A.; Weier, Richard M.; Xu, Xiangdong

PATENT ASSIGNEE(S): G.D. Searle and Co., USA; et al.

SOURCE: PCT Int. Appl., 828 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

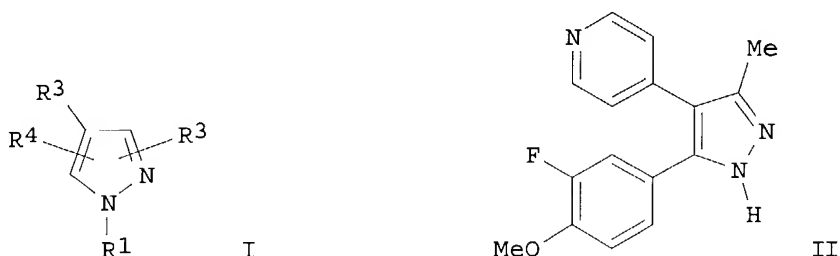
FAMILY ACC. NUM. COUNT: 4

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9852940	A1	19981126	WO 1998-US10436	19980522
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9875883	A1	19981211	AU 1998-75883	19980522
AU 754830	B2	20021128		
ZA 9804358	A	19990524	ZA 1998-4358	19980522
EP 1000055	A1	20000517	EP 1998-923642	19980522
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EE 9900527	A	20000615	EE 1999-527	19980522
BR 9809147	A	20000801	BR 1998-9147	19980522
JP 2002508754	T2	20020319	JP 1998-550650	19980522
NZ 501112	A	20021025	NZ 1998-501112	19980522
NO 9905695	A	20000121	NO 1999-5695	19991119
MX 9910759	A	20000531	MX 1999-10759	19991122
PRIORITY APPLN. INFO.:			US 1997-47570P	P 19970522
			WO 1998-US10436	W 19980522

OTHER SOURCE(S): MARPAT 130:38377

GI



AB Title compds. [I; R1 = H, NH<sub>2</sub>, (cyclo)alk(en)yl, acyl, aryl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3 = pyridyl, pyrimidinyl, quinolyl, etc.; R4 = H, alkyl, heterocyclyl, aryl, etc.] were prepared. Thus, R3CH<sub>2</sub>COMe (R3 = 4-pyridinyl) was condensed with 3,4-F(MeO)C<sub>6</sub>H<sub>3</sub>CHO and the product cyclocondensed with TsNHNH<sub>2</sub> to give title compound II. Data for biol. activity of I were given.

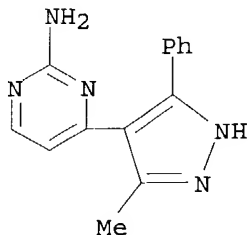
IT 216505-48-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of heteroarylpyrazoles as p38 kinase inhibitors)

RN 216505-48-5 CAPLUS

CN 2-Pyrimidinamine, 4-(3-methyl-5-phenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

10/ 005,133



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file medline

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

43.68

199.31

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-6.24

-6.24

FILE 'MEDLINE' ENTERED AT 11:39:44 ON 16 APR 2004

FILE LAST UPDATED: 15 APR 2004 (20040415/UP). FILE COVERS 1951 TO DATE.

On February 29, 2004, the 2004 MeSH terms were loaded. See HELP RLOAD  
for details. OLD MEDLINE now back to 1951.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the  
MeSH 2004 vocabulary. See <http://www.nlm.nih.gov/mesh/> and  
[http://www.nlm.nih.gov/pubs/techbull/nd03/nd03\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html) for a  
description of changes.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> e 'JNK'

E1	1	JNJ460/BI
E2	1	JNJECTED/BI
E3	5297	--> JNK/BI
E4	599	JNK1/BI
E5	1	JNK11/BI
E6	2	JNK1ALPHA/BI
E7	1	JNK1ALPHA1/BI
E8	1	JNK1APF/BI
E9	1	JNK1BETA/BI
E10	2	JNK1BETA1/BI
E11	1	JNK1BETA2/BI
E12	179	JNK2/BI

=> s e1-e12

1	JNJ460/BI
1	JNJECTED/BI
5297	JNK/BI
599	JNK1/BI
1	JNK11/BI
2	JNK1ALPHA/BI
1	JNK1ALPHA1/BI
1	JNK1APF/BI

10/ 005,133

1 JNK1BETA/BI  
2 JNK1BETA1/BI  
1 JNK1BETA2/BI  
179 JNK2/BI  
L4 5454 (JNJ460/BI OR JNJECTED/BI OR JNK/BI OR JNK1/BI OR JNK11/BI OR  
JNK1ALPHA/BI OR JNK1ALPHA1/BI OR JNK1APF/BI OR JNK1BETA/BI OR  
JNK1BETA1/BI OR JNK1BETA2/BI OR JNK2/BI)

=> s l4 and (inflammato? or inflammati?)

208109 INFLAMMATO?

113729 INFLAMMATI?

L5 564 L4 AND (INFLAMMATO? OR INFLAMMATI?)

=> s l4 and (autoimmune or infecti? or thrombin or thrombo?)

67423 AUTOIMMUNE

863955 INFECTI?

30134 THROMBIN

218217 THROMBO?

L6 274 L4 AND (AUTOIMMUNE OR INFECTI? OR THROMBIN OR THROMBO?)

=> s l4 and neurodeger?

15 NEURODEGER?

L7 1 L4 AND NEURODEGER?

=> s l4 and (cardiac hypertrophy)

294730 CARDIAC

48368 HYPERTROPHY

4493 CARDIAC HYPERTROPHY

(CARDIAC(W)HYPERTROPHY)

L8 55 L4 AND (CARDIAC HYPERTROPHY)

=> s l4 and (allerg? or bone?)

100555 ALLERG?

417905 BONE?

L9 157 L4 AND (ALLERG? OR BONE?)

=> s l5 or l6 or l7 or l8 or l9

L10 933 L5 OR L6 OR L7 OR L8 OR L9

=> d his

(FILE 'HOME' ENTERED AT 11:38:12 ON 16 APR 2004)

FILE 'REGISTRY' ENTERED AT 11:38:23 ON 16 APR 2004

L1 STRUCTURE UPLOADED

L2 44 S L1 FUL

FILE 'CAPLUS' ENTERED AT 11:38:46 ON 16 APR 2004

L3 9 S L2

FILE 'MEDLINE' ENTERED AT 11:39:44 ON 16 APR 2004

E 'JNK'

L4 5454 S E1-E12

L5 564 S L4 AND (INFLAMMATO? OR INFLAMMATI?)

L6 274 S L4 AND (AUTOIMMUNE OR INFECTI? OR THROMBIN OR THROMBO?)

L7 1 S L4 AND NEURODEGER?

L8 55 S L4 AND (CARDIAC HYPERTROPHY)

L9 157 S L4 AND (ALLERG? OR BONE?)

L10 933 S L5 OR L6 OR L7 OR L8 OR L9

=> s l2 and l10

0 L2

L11 0 L2 AND L10



10/ 005,133

=> s l3 and l10

0 L2

L12 0 L3 AND L10

=> d his

(FILE 'HOME' ENTERED AT 11:38:12 ON 16 APR 2004)

FILE 'REGISTRY' ENTERED AT 11:38:23 ON 16 APR 2004

L1 STRUCTURE UPLOADED

L2 44 S L1 FUL

FILE 'CAPLUS' ENTERED AT 11:38:46 ON 16 APR 2004

L3 9 S L2

FILE 'MEDLINE' ENTERED AT 11:39:44 ON 16 APR 2004

E 'JNK'

L4 5454 S E1-E12

L5 564 S L4 AND (INFLAMMATO? OR INFLAMMATI?)

L6 274 S L4 AND (AUTOIMMUNE OR INFECTI? OR THROMBIN OR THROMBO?)

L7 1 S L4 AND NEURODEGER?

L8 55 S L4 AND (CARDIAC HYPERTROPHY)

L9 157 S L4 AND (ALLERG? OR BONE?)

L10 933 S L5 OR L6 OR L7 OR L8 OR L9

L11 0 S L2 AND L10

L12 0 S L3 AND L10

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

4.80

204.11

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-6.24

STN INTERNATIONAL LOGOFF AT 11:44:25 ON 16 APR 2004

## **Ngo, Tamthom**

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**From:** Berch, Mark  
**Sent:** Friday, April 16, 2004 8:17 AM  
**To:** Balasubramania, Venkataraman; Bernhardt, Emily; Coleman, Brenda; Habte, Kahsay (AU1624); Kifle, Bruck; Liu, Hong; McKenzie, Thomas; Ngo, Tamthom; Patel, Sudahker; Rao, Deepak; Raymond, Richard; Shah, Mukund; Tucker, Zachary  
**Subject:** FYI - from a former primary examiner in electrical area

October, 2003

### **An Inside Look At The Patent Examination Process**

By Scott Wolinsky  
SWolinsky@volpe-koenig.com

The successful prosecution of a patent application at the U.S. Patent and Trademark Office (USPTO) requires not only a novel invention and adequate prosecution skills, but a bit of luck. Each patent application is examined by an individual selected from an extensive and diverse pool of examiners with varying personalities and technical expertise. The experience and allowance rates of each examiner vary greatly

#### **Who Is Examining Your Patent Application?**

Once received, each patent application is given a serial number and classified (categorized). A patent examiner is then selected based on the classification and serial number. One may wonder whether the selected examiner will be skilled enough to properly search existing prior art references upon which the allowance or rejection of the claims of the patent application are based. After all, every examiner starts with his or her first patent application after receiving just two weeks of training at the USPTO Patent Academy, where he or she learns the basics of the Manual of Patent Examining Procedure. Will your patent application be examined by that newly recruited examiner. If so, will the examiner's supervisor (supervisory patent examiner or SPE) spend enough time to properly review the patent application? There is always a possibility that the SPE is not sufficiently skilled in the art in which the patent application is classified. When an examiner is promoted to SPE, he or she is often placed in charge of an art unit different from the one in which he or she previously examined. For example, a primary examiner with eight years in the medical equipment field may end up assigned to supervise a group of examiners in the telephony art unit.

Patent examiners at the USPTO are initially hired at several different federal pay scale grade levels based on a series of minimal qualifications. All examining positions require at least a bachelor's degree in computer science, physical

science or engineering, and varying levels of professional engineering experience or graduate study (0-3 years). The salaries of entry level patent examiners presently range from \$32,819 to \$70,959. Overtime is strongly encouraged after several months of experience is accrued, and it is not unusual for a junior examiner with three or four years experience to make more than \$100,000 annually with overtime and bonuses. The USPTO also hires recent graduates from law school, as well as candidates with doctoral degrees, who are normally placed at the upper salary levels. Patent examiners hired at the middle salary levels are considered for promotion after six months of service. Thereafter, these patent examiners are normally promoted to a higher salary level on an annual basis.

The odds are slim that your patent application will be allowed by an examiner with less than one year of experience. SPEs want these new employees to gain experience rejecting patent applications, and there is considerable pressure on these new hires to do so. Many examiners are taught the "one palm rule," whereby if the independent claim is shorter than the palm of their hand, they should reject, reject, reject. Examiners actually base their reputation on their allowance ratios. If you knew the allowance rate of your examiner, you could probably estimate your odds of getting your patent application allowed. Even if the examiner rejects all of your claims, the SPE reviewing the application will still be likely to sign away on the examiner's written report, otherwise known as an office action, without closely scrutinizing the rejection.

After four or five years of a successful examining career, the patent examiner is permitted to advance to the Partial Signatory Program. Until this point in the examiner's career, all office actions, whether non-final or final, must be signed by the examiner's SPE. During a six month period, the examiner is granted temporary partial signatory authority to sign non-final office actions. After several SPEs have reviewed the examiner's non-final office actions, the examiner may receive permanent partial signatory authority. With this authority comes increased responsibility, yet no pay raise or formal promotion.

After having partial signatory authority for six months, the examiner is permitted to advance to the full signatory program. During a six-month period, the examiner is granted temporary full signatory authority to sign allowances and non-final office actions. If the examiner of your patent application is in this program, you should remember that he or she will be particularly cautious before issuing a notice of allowance. The examiner's supervisor is paying careful attention to the actions of the examiner, and the examiner wants a promotion. Of course, the examiner must allow at least some (but not too many) of the examined patent applications for review. After another extensive review, the examiner may receive permanent full signatory authority and be deemed a primary examiner.

Some primary examiners are eventually promoted to the uppermost senior examiner salary level (\$103,019- \$125,400), as part-time trainers or "expert" examiners. However, at this level, most examiners go on to become SPEs and are no longer actively examining under a high-pressure production schedule. Instead, they manage and review the work of a group of examiners. Bonuses offered to SPEs are dependent upon the performance of the examiners in their group. The SPEs are very protective of their examiners, and will usually defend them vigorously when confronted by a complaining applicant.

## Classification And Search

Prior to examination by a patent examiner, a patent application is reviewed by a classifier to determine which art unit will be responsible for examining the application. In many cases, the scope of the claimed invention in the patent application will fall into several possible categories. It is not unusual for the classifier to present the patent application to several SPEs in an attempt to determine where the application should be classified. This process often causes applications to be docketed to an examiner who is unfamiliar with the technology disclosed therein.

The examination quality of a patent application is dependent upon how thorough a search the examiner performs. Examiners often fail to adequately search art classes with which they are unfamiliar. For patent applications with claims that incorporate diverse technology, the examiner is expected to meet with other equally busy examiners, but this expectation is not always met.

Is your patent application classified in a high-profile art that is presently undergoing extensive media attention for issuance of controversial patents (e.g., genetic engineering) or poor quality patents (e.g., business methods)? If so, you should expect extensive and sometimes unexplained delays in receiving office actions, and it is less likely that you will receive a notice of allowance for your patent application.

### Time is Money - The USPTO "Count" System

Each USPTO examiner is allocated a specific number of hours to spend during the prosecution of a patent application. Various performance parameters, such as the examiner's "percent of expectancy" and "percent allowed of disposals," are carefully monitored by supervisors on a biweekly basis to determine performance review results, promotions and bonuses.

Unlike in a law firm where attorneys bill for each hour worked, patent examiners work on a piecemeal basis whereby the examiner is credited only for the number of applications examined. An examiner earns two "counts" per patent application examined. A count is equivalent to half the amount of time that the examiner has to complete the examination of a patent application and "dispose" of it. The number of expected hours per disposal is dependent upon the examiner's experience level and the number of hours allocated to the art examined. The more experience that an examiner has, the fewer hours the examiner is allotted to dispose of an application.

An examiner earns a first "count" upon issuing a first report (office action) regarding the patentability of the patent application and a second "count" when the application is disposed of (allowed, abandoned, or when the examiner responds to an appeal). It is not unusual for an examiner to spend more than the time equivalent to one "count" to complete a first office action. The examiner does not receive extra credit for issuing a second non-final office action, a final office action, telephone interviews or an advisory action. The examiner is allowed to charge one hour of "other" time for each instance when a personal (in office) interview is held with an applicant and/or the applicant's representative.

An examiner earns two "easy counts" when the prosecution of an allowed patent application that has not yet issued is continued such that new references submitted by the applicant can be considered. This, of course, assumes that the references are not deemed relevant enough by the examiner to warrant the withdrawal of the allowance.

### Consider The Examiner's Position

Patent examiners are human. They are under a great deal of pressure to perform to the highest standards. You can increase your chances of getting your application allowed by making the examiner's experience with your patent application as stress-free as possible.

You can increase the odds in your favor by limiting the number of claims in the patent application to a reasonable number (e.g., 20 or fewer). Perhaps a major flaw in the USPTO examination process is that a patent examiner is not normally granted extra hours to examine patent applications with excessive claims. In cases involving a large number of claims, it is likely that the examiner will come up with a restriction requirement, or provide a blanket rejection for a large group of those claims. Unless the patent application is examined by an exceptionally conscientious examiner, an excessive number of claims will most likely decrease the quality of the examination.

Always be courteous when speaking with the examiner even if the examiner is being unreasonable. While complaining to the supervisor or the director about an examiner may solve immediate problems, the examiner may hold a grudge and can purposely delay your notice of allowance for years by creating new and seemingly odd rejections. Beware, for the next patent application that you file may be assigned to the same examiner.

<http://www.volpe-koenig.com/showarticle.asp?Show=12>

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